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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,986	02/10/2004	John F. Yanus	D/A3066	1319

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Patent Documentation Center  
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Xerox Square 20th Floor  
100 Clinton Ave.  
Rochester, NY 14644

EXAMINER
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RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/775,986	<b>Applicant(s)</b> YANUS ET AL.	
	<b>Examiner</b> Christopher RoDee	<b>Art Unit</b> 1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 6-18, 20-27, 30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-18, 20-27, 30, and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3, 6-9, 14-18, 20, 24, 25, 27, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura *et al.* in US Patent Application Publication 2002/0025483.

Claims 10-13, 21-23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura *et al.* in US Patent Application Publication 2002/0025483 as applied to claims 1, 3, 6-9, 14-18, 20, 24, 25, 27, 30, and 31 above, in view of Yuh *et al.* in US Patent 6,261,729.

Claims 1-3, 6-9, 14-18, 20, 24, 25, 27, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamura *et al.* in US Patent Application Publication 2002/0025483 as applied to claims 1, 3, 6-9, 14-18, 20, 24, 25, 27, 30, and 31 above, in view of Mori in US Patent 5,567,557.

These rejections were presented in the last Office action. As applicants recognize in the recent response, each reference relies upon Kawamura as the base reference. This reference was relied upon for its disclosure of an imaging member having a support **1**, a charge generating layer **5**, a first charge transport layer **4-1**, and a second charge transport layer **4-2** ([¶¶ 0063], [0243], [0244], [0278], [0279]). The charge transport layers contain at least one binder resin and at least one charge transport material ([¶¶ 0239], [0241]; Example 5). Kawamura also teaches that the charge transport layer can contain an antioxidant ([¶ 0294]), such as stearyl-p-(3,5-di-t-butyl-4-hydroxyphenyl)propionate ([¶ 0297]). The Examiner took the

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position that it would have been obvious to one having ordinary skill in the art at the time the invention was made to place the antioxidant stearyl-p-(3,5-di-t-butyl-4-hydroxyphenyl) propionate) in the second charge transport layer of Example 5 because the reference's disclosure specifically teaches that antioxidants are usefully included in a charge transport layer. The artisan would have three options when deciding where to put the antioxidant - the first charge transport layer, the second charge transport layer, or both – and given these limited options placement of the specifically recited stearyl-p-(3,5-di-t-butyl-4-hydroxyphenyl) propionate) in the second charge transport layer is well motivated for the worker of ordinary skill in the art.

Applicants traverse this rejection because there is no motivation to modify the reference in the manner proposed by the Examiner. The composition of both of the claimed charge transport layers is limited by the transitional phrase "consisting of". Kawamura teaches the possible addition of filler, plasticizer, leveling agent, hindered phenol to improve charging properties, and antioxidant. The Examiner's reasoning, according to Applicants, applies to every permutation and combination of these additives taught by Kawamura, and the Examiner, in Applicants' opinion, has not shown where Kawamura teaches adding only the hindered phenol. Applicants also take the position that the Examiner is choosing an imaging member where only the hindered phenol is added based on improper hindsight reasoning. There is no teaching or discussion that would limit or point the artisan to the claimed imaging member besides the Applicants' disclosure. See response page 8.

The Examiner has carefully considered Applicants' remarks and has reviewed the references, particularly, Kawamura in detail. Applicants' interpretation of the pending claims is accurate. In the imaging member, the first charge transport layer permits two and only two component: a charge transport compound and a polymer binder. The second charge transport

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layer permits only three components: a charge transport compound, a polymer binder, and a hindered phenol of one of the two formulae specified in the claims.

Kawamura exemplifies an imaging member having a supporting substrate, a photogenerating layer, a first charge transport layer containing a charge transport compound and a polymer binder and a second charge transport layer on the first containing a charge transport compound and a polymer binder. The difference between this example and the instant claims is the presence of an antioxidant in the second charge transport layer. As noted above, and throughout prosecution, Kawamura teaches that the charge transport layer can contain additional components. Applicants are correct, there are five different types of components that can be added to the charge transport layer, but it is reasonable to expect that the artisan would select any one of these five as he attempts to improve the characteristics of the reference's imaging member. Given the detail the reference provides for the antioxidants, it is apparent that Kawamura gave considerable thought to the types of antioxidants that would function in the reference (¶¶ [0295] – [0309]). Further, it is reasonable to expect the skilled artisan to select one of the specifically disclosed hindered phenols and to use this compound in one of the three possible orientations of the first charge transport layer, the second charge transport layer, or both. Some experimentation is required to arrive at the claimed invention, but the level of experimentation is well within that expected of the skilled artisan, particularly given the high level of skill in the electrophotographic arts.

All rejections rely on Kawamura and the traversals are based on the position that this reference is not sufficient to render the independent claims obvious. Because the Examiner has maintained the position that the reference does indeed make obvious the imaging member with the specified first and second charge transport layers, the rejections remain applicable for the other claims as well, lacking any further ground of traversal.

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***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on Monday to Thursday from 5:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cdr  
10 January 2007



**CHRISTOPHER RODEE  
PRIMARY EXAMINER**